Chapter 401

CORPORATE RISK INFORMATION SYSTEM (CRIS)

Introduction

Corporate credit unions (corporates) are unique financial institutions. They are the only institutions, other than Federal Reserve and Federal Home Loan Banks, that exist primarily to provide financial, liquidity, and correspondent services to other financial institutions (e.g., credit unions).

The system used to detect, measure, and monitor these risks must be unique to the environment in which it will be used. Whereas the financial stability of corporates is crucial to their credit union members' success in providing services to their members, a regulatory risk rating system needs to be highly effective in identifying and measuring specific areas of risk during the supervisory process. By accurately detecting and communicating risk areas, NCUA can achieve the most effective supervisory efforts possible, and help avoid a major financial and operational crisis in the corporate credit union system (System).

NCUA's responsibilities to effectively detect, communicate, and control risk within the System, necessitates a highly specialized and effective risk rating system.

NCUA considers management's role in corporates to be the major catalyst in the financial and operational success of the institutions. In order to benefit NCUA, a corporate risk rating system must effectively evaluate, measure, and report the qualitative strengths and weaknesses of management personnel, practices, and policies. This system operates independent of the quantitative risk measures such as empirical levels of capital, earnings, and market risks.

CRIS separates the assessment and communication of quantitative financial risks from qualitative operational and managerial risks and assigns individual Financial Risk and Risk Management Composite and Component Ratings, respectively.

The Financial Risk Composite Rating is:

> An assessment of measurable risk exposure to the corporate's capital, relative to levels of exposure to credit, interest rate, and liquidity risk as of the date of the examination.

The Risk Management Composite Rating is:

> A qualitative risk assessment derived from the examiner's evaluation of management's policies, practices, and expertise in identifying, measuring, monitoring, reporting, and controlling risk.

Used in conjunction, the components allow NCUA to more effectively focus resources in specific areas of risk identified during the supervisory process, and develop and implement appropriate supervision strategies.

The CRIS rating system's examination and supervision objectives are:

1. To detect, evaluate, and measure financial and operational risks;
2. To determine the effect that these risks may have upon the financial (capital) strength of the institutions;
3. To assess the quality of management, policies, and procedures;
4. To assess and control risk to the National Credit Union Share Insurance Fund (NCUSIF); and
5. To provide a rating system, internal to NCUA, that will be used to allocate agency resources for ongoing examination and supervision needs of corporates.

CRIS System

CRIS provides individual composite ratings for both Financial Risk and Risk Management, based upon certain components as follows:

1. The Financial Risk Composite rating is derived by the measurement and interrelationship of five quantitative components: Empirical Capital Level; Earnings; Interest Rate

Risk Exposure; Liquidity Risk Exposure; and Credit Risk Exposure; and

2. The Risk Management Composite rating is similarly derived through the evaluation of seven components stressing the qualitative nature of risk management. These are: Capital Accumulation Planning; Profit Planning and Control; Interest Rate Risk Management; Liquidity Risk Management; Credit Risk Management; Operations Risks; and Board Oversight, Audit & Compliance.

Disclosure of CRIS to Corporates

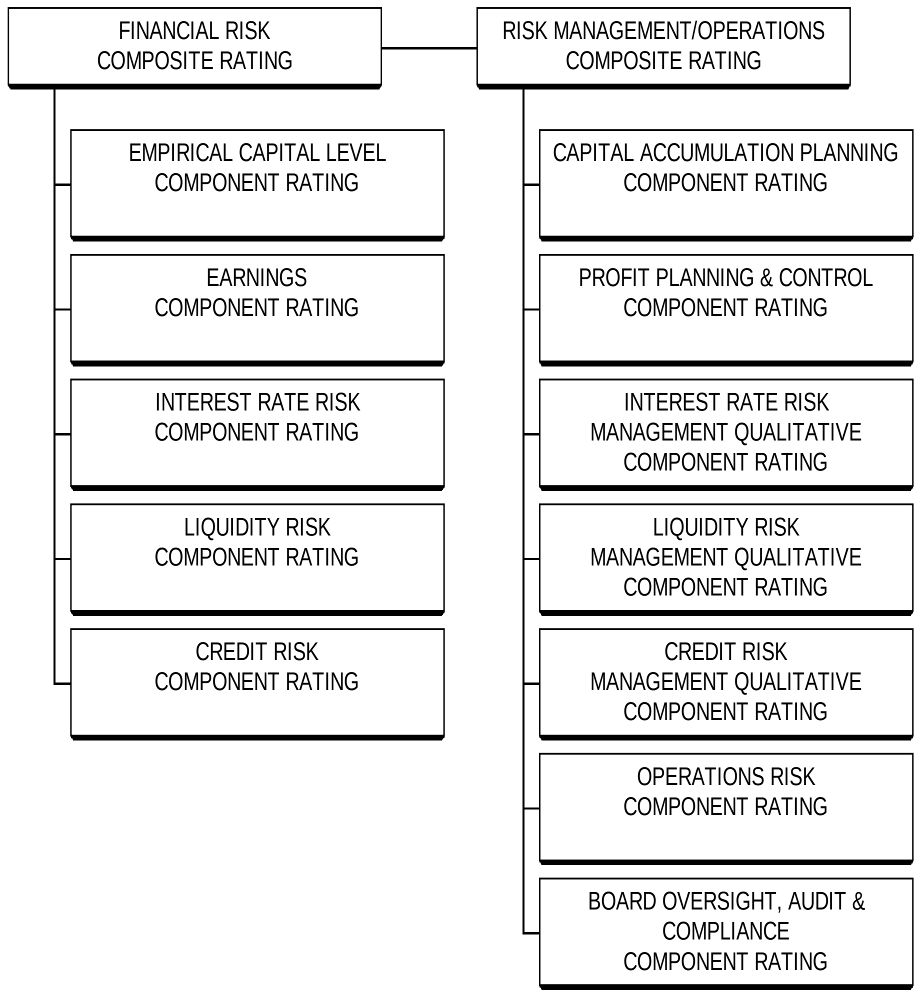
The major emphasis of the examination report will focus on the individual areas of concern identified during the examination and implementing corrective action. However, both the Financial Risk and Risk Management composite and component ratings will be disclosed in the Executive Summary section of the examination report. To eliminate the problem of officials focusing on the ratings as opposed to the issues, the ratings will not be disclosed until after the issues are discussed with a corporate's board during the joint conference.

Coordinating the disclosure of CRIS with State Supervisory Authorities (SSA)

Each SSA has specific procedures for the disclosure of their risk rating systems to state chartered corporates. Examiners should coordinate their efforts with the SSA to ensure that the intent of the agreements reached in the Document of Cooperation and individual agreements with SSAs, as well as the conditions in Chapter 104 of this guide, are met.

The diagram on the next page provides a practical depiction of the CRIS rating system.

CORPORATE RISK INFORMATION SYSTEM (CRIS)



Interrelationship of CRIS Composites, Components and Evaluation Factors

Under CRIS the corporate will be assigned a Financial Risk and a Risk Management composite rating. The composite ratings are derived through the interrelationship between underlying component ratings. The component ratings are derived through the examination of relevant Evaluation Factors. Examiners will rate the components and composites 1 through 5; 1 being the best and 5 the worst. The risk rankings assigned to the Evaluation Factors will be used to determine the overall component ratings to which they relate. Definitions of component and composite ratings are defined in detail in

Appendix 401A, CRIS Composite and Component Rating Definitions and Evaluation Factors. Assignment of separate Financial Risk and Risk Management Composite Ratings provides a more effective manner of identifying immediate and potential risks to a corporate's financial strength. By providing separate ratings for quantitative (financial risk) and qualitative (risk management abilities) factors, an accurate and effective risk assessment of the corporate can be made.

Evaluation Factors

Evaluation Factors are reviewed as part of the overall examination process by the examination team. Each Evaluation Factor must be assessed by the examiner as it applies to both the corporate's scope of business and any Part 704 Expanded Authorities (if applicable). Evaluation Factors are assigned specific risk rankings based upon the examiner's review and professional judgment. Generally, the risk ranking assigned to each Evaluation Factor should be independent of others. If applicable, certain Evaluation Factors may be given more weight in determining the overall composite. Examiners should use professional judgment when determining whether to place more emphasis on one Evaluation Factor over another when deriving an overall component rating. Each Evaluation Factor is assigned a risk ranking as noted in the tables below:

Financial Risk Component	
Risk Ranking	**Degree of Risk to Capital and/or Earnings**
1	Low Risk
2	Moderate (managed) Risk
3	High Risk
4	Excessive Risk
5	Critical Risk

Risk Management Component	
Risk Ranking	**Quality of Policy or Risk Management Process**
1	Exceptional
2	Acceptable
3	Minimally Acceptable
4	Inadequate
5	Seriously Deficient

The risk rankings assigned to the Evaluation Factors must be derived based on professional judgment of the operating principles and standards in this Corporate Examiner's Guide, the Guidelines for Submission of Requests for Expanded Authority, and other industry accepted standards. The Financial Risk and Risk Management components will be derived as a result of the interrelation of the risk rankings assigned to the individual Evaluation Factors.

Composite and Component Ratings

Financial Risk Composite Rating

The Financial Risk Composite Rating is derived, by not only assessing the corporate's empirical level of capital and earnings, but also determining credit, interest rate, and liquidity risk exposures, and the effects these risks could have on the earnings and capital levels. Individual component ratings are assigned to these areas when developing the overall composite rating.

The examiner must keep in mind that the Financial Risk Composite Rating is a quantitative assessment of relative capital strength in relation to earnings performance and financial risks. The Financial Risk Composite Rating is not an arithmetic average of the individual components. The component ratings should be evaluated independently using the guidelines in Appendix 401A and the examiner's judgment to derive and assign the overall Financial Risk Composite Rating. The component ratings are similarly derived through an assessment of the individual Evaluation Factors reviewed as part of the examination scope. Guidelines for examiner assessment of the individual Financial Risk components are provided in specific sections of this chapter, and throughout the Corporate Examiner's Guide. A list of Evaluation Factors is listed in Appendix 401A, along with definitions of the Financial Risk Component and Composite Ratings.

Risk Management Composite Rating

The ability of management to develop appropriate business plans, operational policies and procedures, and risk management policies and practices is crucial to ensure the ongoing financial soundness of each corporate. CRIS acknowledges the importance of management's capabilities by providing a separate and distinct Composite Rating in assessing the abilities and effectiveness of corporate management. The Risk Management Composite Rating should reflect the examiner's assessment of the qualitative factors attributable to the management of financial risk and those inherent within corporate operations (i.e., processes and results that cannot be measured on a numerical basis). The Risk Management Composite Rating will be derived through the assessment of the seven individual Risk Management Component Ratings, as follows:

1. Capital accumulation planning;
2. Profit planning and control;
3. Interest rate risk management;
4. Liquidity risk management;
5. Credit risk management;
6. Operations; and
7. Board oversight, audit & compliance.

The Risk Management Composite Rating is determined as a result of the examiner's review of the corporate's operational processes, policy making and planning capabilities, and risk management and reporting process. The Risk Management Composite Rating is not measured on financial results. This Composite Rating will be assigned as a result of the examiner's review of each component's Evaluation Factors as they relate to the corporate's scope of operation and Expanded Authorities (if applicable).

Assignment of Composite Ratings

The examiner will follow the composite rating definitions outlined in Appendix 401A to assign both the Financial Risk and Risk Management Composite Ratings. OCCU Form 102I will be used to facilitate this process. On OCCU 102I, the examiner in charge (EIC) will assign ratings using team member recommendations; however, the EIC makes the final CRIS rating decisions.

Examiners have the latitude to increase or decrease any component or composite rating based on individual circumstances and/or professional judgment; however, rationale supporting increases and/or decreases should be documented in the confidential section of the examination report. OCCU 102I will be included with the field and office copies of the examination report. The work papers will provide support for the component and composite ratings by listing the risk rankings assigned to the individual Evaluation Factors*.*

Empirical Capital Level & Capital Accumulation

Since the revision of Part 704 in 1998, corporates have increased retained earnings, some more successfully than others. When reviewing capital, the examiner should specifically address retained earnings trends and ratios in relation to financial and operational risks.

Meeting minimum capital requirements is a key factor in determining capital adequacy. More importantly, the examiner must consider whether the corporate's operations and risk position requires capital above the minimum regulatory threshold. For example, the examiner should consider whether the corporate will continue to maintain adequate capital levels in light of current and planned activities, such as Expanded Authorities.

Corporates operating at Base or Base-Plus Expanded Authority must maintain a minimum capital ratio of 4 percent. However, a corporate with Part I or II Expanded Authority will need a minimum 4, 5, or 6 percent capital ratio depending on their corresponding NEV exposure limit of 20, 28, or 35 percent, respectively. The examiner must keep in mind that these ratios are merely the minimum regulatory requirement; given additional risks in each corporate, these ratios may be minimally adequate or even inadequate.

As part of the risk rating process the examiner will assign a Financial Risk Component Rating to Empirical Capital Strength and a Risk Management Component Rating to Capital Accumulation Planning. The capital versus risk relationship will be reflected in the Overall Financial Risk Composite Rating when the Empirical Capital Level Component Rating is evaluated in relation to the other risk related components (i.e., interest rate, liquidity, credit, earnings risks).

Empirical Capital Level

In assigning this Component Rating, the examiner should consider all capital related Evaluation Factors and any additional issues directly or indirectly affecting capital. At a minimum, the following Evaluation Factors should be considered:

Retained Earnings Ratio:

Retained earnings and the retained earnings ratio are defined in Section 704.2. When assigning a risk ranking to this factor, the examiner should consider the corporate's overall level of financial and operational risks, including any Expanded Authorities. Generally, a corporate taking on higher degrees of credit, interest rate, liquidity, and operational risk should maintain a higher level of retained earnings, as noted in the table below:

Recommended Risk Rankings for Retained Earnings Evaluation Factor			
Risk Ranking	**Base, Base+**	**Part I**	**Part II**
1	5.0% or greater	5.5% or greater	6.0% or greater
2	3.0 to less than 5.0%	3.5% to less than 5.5%	4.0% to less than 6.0%
3	2.0% to less than 3.0%	2.5% to less than 3.5%	3.0% to less than 4.0%
4	1.0% to less than 2.0%	1.5% to less than 2.5	2.0% to less than 3.0%
5	less than 1.0%	less than 1.5%	less than 2.0%
Note: Part III corporates are evaluated using the column corresponding with their Part I or Part II authority and NEV threshold. Part IV and V corporates are evaluated under the Base and Base+ column unless they have an expanded authority level requiring use of another column. Wholesale corporates are evaluated under the column for Part I authority.			

Core Capital Ratio: When assigning the ranking for the core capital ratio (as defined in Section 704.2), the examiner will take into account the corporate's earnings retention position, and the trend and mix of capital.

Capital Ratio: Section 704.3 and Appendix B to Part 704 set forth specific capital ratio requirements for Base and each level of Expanded Authorities. As noted in Appendix B, the minimum capital ratio is also established as a result of the designated NEV exposure limit chosen by corporates with Part I or II Expanded Authorities. The examiner should consider the corporate's current capital level, and ability to achieve future capital goals when assigning the rating for this Evaluation Factor. The table below establishes the recommended risk rankings based on each corporate's Expanded Authorities or operating level:

Recommended Risk Rankings for Capital Ratio Evaluation Factor

Risk Ranking	Base & Base+	Part I 20% NEV	Part II 20% NEV	Part I 28% NEV	Part II 28% NEV	Part I 35% NEV	Part II 35% NEV
1	6.0% or greater	6.50% or greater	7.00% or greater	7.00% or greater	7.50% or greater	7.50% or greater	8.00% or greater
2	5.0% or less than 6.0%	5.50% or less than 6.50%	6.00% to less than 7.00%	6.00% to less than 7.00%	6.50% or less than 7.50%	6.50% or less than 7.50%	7.00% or less than 8.00%
3	4.0% or less than 5.0%	4.50% or less than 5.50%	5.00% or less than 6.00%	5.00% or less than 6.00%	5.50% or less than 6.50%	5.50% or less than 6.50%	6.00% or less than 7.00%
4	3.0% or less than 4.0%	3.50% or less than 4.50%	4.00% or less than 5.00%	4.00% or less than 5.00%	4.50% or less than 5.50%	4.50% or less than 5.50%	5.00% or less than 6.00%
5	Less than 3.0%	Less than 3.50%	Less than 4.00%	Less than 4.00%	Less than 4.50%	Less than 4.50%	Less than 5.00%

Note: Part III corporates are evaluated using the column corresponding with their Part I or Part II authority and NEV threshold. Part IV and V corporates are evaluated under the Base and Base+ column unless they have an expanded authority level requiring use of another column. Wholesale corporates are evaluated under the column for Part I authority.

Capital Trends: When determining the Empirical Capital Component Rating, the EIC must consider the capital level, mix, and trends during as of the effective date of the examination. The EIC should also consider the risk rankings assigned to the above Evaluation Factors. The overall Financial Risk Composite Rating will reflect the relationship between Empirical Capital Strength and balance sheet and operational risk levels.

Capital Accumulation Planning Component Rating

As part of the examination process, the examiner will evaluate and assess the strength of the corporate's capital accumulation plan, and the effectiveness with which it is implemented. The capital accumulation plan should be developed after careful consideration of current and projected balance sheet and operational risk activities (i.e., Expanded Authorities, new services, etc.).

Capital accumulation plans will be evaluated and assigned a component rating that will be included in the derivation of the overall Risk Management Composite Rating. The evaluation of capital accumulation plans will require that the examiner draw upon a variety of other financial and risk related factors impacting the corporate. Chapter 204 of this guide provides detailed discussion of some of the attributes of effective capital accumulation planning.

Earnings and Profit Planning Component

A corporate should have earnings sufficient to accumulate capital levels to meet or exceed minimum capital requirements and absorb operating losses. The minimum capital requirements will vary in relation to Expanded Authorities, as well as the corporate's overall balance sheet and operational risk profile. Examiners should use professional judgment to evaluate the adequacy of earnings in relation to the level of capital and the risks inherent in the portfolio, and any off-balance sheet risks. For example, a corporate with Parts II and IV Expanded Authorities will be evaluated more stringently than one with Base-Plus Expanded Authority because it has the authority to expose its capital and earnings to greater risk.

When examiners assess the adequacy of corporate earnings, general economic and market related factors should be considered. Earnings trends and balance sheet flexibility are two factors that should be considered, in addition to actual financial results.

Given the complexity of each corporate's balance sheet, there is no easy formula for determining the adequacy of earnings. The examiner should look for earnings characteristics such as stability, trend, and composition. The level of operating expenses should be reviewed in relation to the overall earnings composition. The examiner should be cognizant of the risk/return tradeoff or concept often employed as part of corporate asset/liability management strategies. Generally, assets carrying additional risk should provide an adequate compensating return used to build capital, or to provide the membership with greater return.

Although the minimum capital requirements are specifically set forth in Section 704.3, and Appendix B to Part 704, the adequacy of earnings is subjective based on qualitative and quantitative factors and the examiner's professional judgment. These qualitative and quantitative measures may relate to, but are not limited to, the current capital level, the level of credit, interest rate, liquidity, and operational risk, and management's effectiveness. Further guidance for evaluating earnings is discussed in Chapter 302 of this guide.

When evaluating the adequacy of earnings, the examiner should consider the following factors:

<u>Quantitative Earnings Evaluation Factors (Financial Risk Composite)</u>

1. Net Income Level;
2. Earnings Trends;
3. Earnings Composition (gross income, cost of funds, fee income);
4. Operating Expenses;
5. Product Line Profitability; and

6. Non-Operating Income Level.

Qualitative Earnings Evaluation Factors (Risk Management Composite)

1. Budgeting and Reporting;
2. Earnings in Relation to Capital Planning;
3. Effectiveness of Cost Accounting Systems; and
4. Pricing Strategies and Policies.

Sensitivity to Interest Rate Risk

Interest rate risk (IRR) is the exposure of capital and earnings to movements in interest rates. The economic perspective, termed net economic value (NEV), focuses on the difference in the fair value of assets and the fair value of liabilities in today's interest rate environment and the sensitivity of NEV to interest rate changes. The accounting perspective, referred to as net interest income (NII), focuses on the effect of interest rate changes on the corporate's projected earnings under both current and projected interest rate scenarios.

The IRR Component Rating addresses the corporate's performance in identifying, measuring, monitoring, reporting, and controlling exposure to interest rate changes. The examiner will assess quantitative and qualitative factors in order to assign an Interest Rate Risk Exposure Component Rating and an Interest Rate Risk Management Component Rating, respectively.
Given the importance of each corporate's IRR management process, qualitative factors such as the robustness of the model and validity of the assumptions will be utilized in assigning both the quantitative and qualitative components.

In deriving the IRR Component Rating, the examiner is to consider 12 Evaluation Factors listed in this section. The examiner should determine whether rankings for additional factors are to be documented under the "other" caption.

The examiner should assign the component rating on a case-by-case basis using professional judgment, and will consider the interrelationships of the Evaluation Factors in light of any Expanded Authorities.

The Sensitivity/IRR Evaluation Factors focus the examiner on the sensitivity measures, documentation, and testing the

corporate performs, rather than on management's capabilities. The examiner's evaluation of management's effectiveness and expertise should be considered when assigning the IRR Management Component Rating under the overall Risk Management Composite.

Considering the interrelationships of the various Evaluation Factors, the examiner may assign a lower or higher ranking than is specified in the guidelines; however, the rationale or justification for such decisions should be well-documented in the examination work papers**.** The examiner should refer to Appendix 401A when assessing these Evaluation Factors.

<u>Qualitative IRR Exposure Evaluation Factors</u>

Base case NEV ratio: Under Section 704.8, a corporate must calculate its NEV ratio at least quarterly; the NEV ratio must be calculated monthly, if the NEV ratio falls below 3 percent at the last testing date. In general, corporates with Expanded Authorities must compute their NEV ratio monthly; however, the specific requirements are detailed in Appendix B to Part 704.

Section 704.8 establishes a minimum NEV ratio floor of 2 percent under the worst-case test for parallel shocks in the Treasury yield curve. Therefore, a 2 percent base case NEV ratio represents a weak capital position and an excessive risk level limiting the corporate's flexibility to respond to interest rate shocks and comply with the Section 704.8(d)(1)(ii) NEV Exposure Measure. Corporates in this situation have a very small margin for error with their NEV modeling process and even a slight increase in IRR jeopardizes their compliance with the 2 percent NEV ratio floor.

Examiners should compare each corporate's base NEV ratio, NEV Exposure Measure, and NEV Volatility Measure to the following tables to assist them in determining the overall IRR Component Rating:

BASE NEV RATIO			
Ranking	Base, Base +	Part I	Part II
1	6.0% or greater	6.5% or greater	7.0% or greater
2	5.0% to 5.99%	5.5% to 6.49%	6.0% to 6.99%
3	4.0% to 4.99%	4.5% to 5.49%	5.0% to 5.99%
4	3.0% to 3.99%	3.5% to 4.49%	4.0% to 4.99%
5	Less than 3.0%	Less than 3.49%	Less than 3.99%

NEV Exposure Measure (worst case NEV ratio): Section 704.8(d)(1)(ii) provides that a corporate must limit its risk exposure to a level that does not result in an NEV ratio below 2 percent under parallel shocks in the yield curve of plus/minus 300 basis points. Generally, a low risk corporate would maintain an NEV Exposure Measure above 3 percent, as noted below.

NEV EXPOSURE MEASURE	
Ranking	All Authorities
1	5.0% or greater
2	4.0% to 4.99%
3	3.0% to 3.99%
4	2.0% to 2.99%
5	Less than 2.0%

NEV Volatility Measure (post shock percentage change in NEV ratio): This factor is defined in Section 704.2. The corporate must limit its IRR exposure under parallel shocks in the yield curve across a range of plus/minus 300 basis points to a level that does not result in an NEV Volatility Measure of more than 15, (Base), 20 (Base+), 20, 28, or 35 for corporates having Part I and/or II Expanded Authority. Refer to the tables below.

NEV VOLATILITY MEASURE		
Ranking	15% NEV Limit	20% NEV Limit
1	less than 6.0%	less than 9.0%
2	6.0% to less than 9.99%	9.0% to 14.99%

3	10.0% to 14.99%	15.0% to 19.99%
4	15.0% to 19.99%	20.0% to 27.99%
5	20.0% or greater	28.0% or greater

NEV VOLATILITY MEASURE		
Ranking	**28% NEV Limit**	**35% NEV Limit**
1	less than 12.0%	less than 15.0%
2	12.0% to 19.99%	15.0% to 24.99%
3	20.0% to 27.99%	25.0% to 34.99%
4	28.0% to 34.99%	35.0% to 39.99%
5	35.0% or greater	40.0% or greater

Qualitative IRR Management Evaluation Factors

Risk Model Capabilities: This Evaluation Factor reflects the examiner's conclusions regarding the capabilities of the NEV model as implemented by management or a third-party vendor (i.e., if NEV modeling is outsourced). The examiner should refer to Chapter 202, Asset/Liability Management, and to corporate staff for documentation of the fundamental characteristics of the risk model. The examiner should document any overrides of industry standard inputs indigenous to NEV modeling.

Modeling Assumptions: This Evaluation Factor considers whether the price sensitivities are reasonable and supportable in light of any prepayment speed assumptions. The examiner will consider the source (such as information vendor or in-house systems) of prepayment estimates used to measure and monitor the price sensitivity of complex investments. If the model generates securities valuation output at the individual instrument level, such detail may serve as appropriate evidence of securities price sensitivity monitoring.

Additional NEV and Stress Testing

The examiner should assess the frequency, accuracy, and validity of the additional tests periodically required by Section 704.8(d)(2). This assessment should include determining whether management should go above and beyond the regulatory requirements, based on balance sheet risk, or external factors (i.e., interest rate environments, economic conditions, event risk, etc.). For example, performing rate shocks of 400 or 500 basis points, ramped simulations, etc. Consideration should also be given to the corporate's Expanded Authority level when assessing whether the frequency and scope of additional testing are adequate.

Modeling Process/Internal Control: The examiner should assess the reasonableness of the modeling process, including the audit trail, and the change control process (i.e., a change of algorithm or a change of source of volatility, etc.).

ALCO Documented Strategies: The examiner should review ALCO's documented strategies and assess whether balance sheet changes have been consistent with those strategies. The examiner may consider documented changes in strategies and changes in market conditions in assigning this ranking.

Compliance, Including Internal Validation: The examiner should review the corporate's documentation of its compliance with internal policy limits and with Section 704.8 requirements.

Third Party Validation: The examiner should review any third party validation for scope, methodology, and reasonableness, as required by Section 704.4.

Policies/Procedures: The examiner should review any IRR policies and procedures to determine whether material omissions or deficiencies exist.

Other: The EIC should assign other evaluation factors in light of individual circumstances and any Expanded Authorities.

Liquidity Risk Exposure and Management

Liquidity Risk is the exposure of capital and earnings to costs incurred by the corporate in meeting present and anticipated cash flow needs. Liquidity Risk generally arises from potential mismatches between asset and liability cash flows. Liquidity Risk assessment is complicated by the uncertainties of asset and liability cash flows due to embedded options or other derivatives impacting cash flows. Liquidity Risk includes the risk of early and unexpected share account redemptions.

Liquidity Risk Management includes assessing the memberships' potential liquidity needs in a variety of economic scenarios. Reference should be made to Section 704.9 (Liquidity), and Chapter 202 (ALM) of this guide for further liquidity related factors.

Liquidity sources typically include advised and committed LOCs from U.S. Central or other institutions repurchase transactions, security sales, and commercial paper. The examiner should assess the corporate's analysis of assets to determine the degree of marketability and potential use of assets as collateral to provide liquidity in the event that this option becomes necessary and is cost beneficial. The examiner should assess the corporate's analysis of the behavior of its shares under normal and alternative economic scenarios, including under a stress ("worst-case") scenario. Management's analysis of the potential liquidity impact arising from any off-balance sheet activities is also a factor.

In measuring and managing net funding requirements, a corporate should prepare a schedule comparing future cash inflows to outflows over a series of time periods. The difference between cash inflows and outflows in each period, or the excess or deficit of funds, becomes a starting-point for a measure of a corporate's future liquidity excess or shortfall. The assessment of different economic scenarios should provide a basis for the corporate's plans to fill any liquidity shortfalls. The examiner should assess the adequacy of the cash flow related assumptions under different scenarios.

The examiner should assess the corporate's access to external (market) sources of liquidity. This assessment should include a review of the diversification of its liabilities, the documented established relationships with liability-holders (e.g., commercial paper), and the corporate's asset-sales markets, if any. Building strong relationships with funding sources can provide a corporate with additional options in the event that contingency liquidity plans need to be implemented. The frequency of contact with and use of a funding source are two indicators of the strength of a funding relationship.

At a minimum, the following Quantitative and Qualitative Liquidity Risk Evaluation Factors should be reviewed:

Quantitative Liquidity Risk Evaluation Factors

1. Significant asset/liability concentrations;
2. Core funds determination; and
3. Liquidity measures - cash budgeting.

Qualitative Liquidity Management Evaluation Factors

1. Policies/Procedures (i.e., objectives and contingency plans);
2. Alternative Funding Sources:
    a. Development.
    b. Maintaining market presence.
    c. Testing.
    d. Commercial Paper.
    e. Repurchase opportunities;
3. Disintermediation plan (worse case);
4. Early withdrawal penalties;
5. Compliance/monitoring; and
6. Other relevant factors.

Credit Risk

Credit risk is present any time a corporate extends credit, purchases investments, makes commitments and guarantees, and enters into contractual agreements, whether reflected on or off balance sheet. In other words, credit risk is found in all activities where success depends on counterparty, issuer, or a borrower’s ability to perform or repay.
Credit risk arises when engaging in a broad range of activities including, the selection of investment products, brokers, and counterparties. Credit risk also arises due to country or sovereign exposure, as well as indirectly through guarantor performance. These credit risks are discussed in more detail in Chapters 201, Investments and 203, Loan Review.

When rating credit risk, the examiner should consider both the quantitative level of credit risk the corporate is exposed to (i.e., concentration risks, third party credit ratings of investment securities, etc.), as well as qualitative factors (i.e., credit risk management policies and procedures). At a minimum, the following key factors should be evaluated when determining Credit Risk Exposure and Credit Risk Management Component Ratings:

Quantitative Credit Risk Exposure Evaluation Factors (Financial Risk Composite)

1. Concentrations of credit by investment type;
2. Concentrations of credit by issuer;
3. Concentrations by sector or industry;
4. Concentrations of loan commitments and/or guarantees; and
5. Loan delinquency and charge off ratios and trends.

Qualitative Credit Risk Management Evaluation Factors (Risk Management Composite)

1. Quality of investment, loan, and credit risk management policies and procedures;
2. Quality of loan underwriting;
3. Quality of credit administration, documentation, and reporting (securities, counterparties, credit ratings, watch lists, outstanding commitments, and ongoing monitoring);
4. Quality of assets; and
5. Other applicable credit risk factors.

The examiner must tailor the scope of the credit risk management review to the corporate's Part 704 Expanded Authority level. For example, a corporate with Base operating authority and a relatively simple investment portfolio will not be expected to have an extremely sophisticated credit risk management function. However, corporates with Part I or II Expanded Authorities can purchase lower rated investments requiring a more elaborate credit risk management process. Specifics related to the credit review required for the various Expanded Authorities are discussed in Chapter 201, Investments, and in the Guidelines for Submission of Requests for Expanded Authority.

Operations, Board Oversight, Audit and Compliance

Management consists of the board of directors, various committees, and operating management. The quality of management is the most important element in the successful operation of a corporate. The quality of this element is normally the factor most indicative of how well risk is identified, measured, monitored, reported, and controlled.

Strong management is a key factor in a corporate remaining financially sound, regardless of external factors. External factors include items such as event risk, economic conditions, interest rate environments, and other factors impacting the corporate's balance sheet or financial condition. The ability to promptly address existing problems and risks, and the capacity to be forward thinking, contribute to the success of each corporate, and help ensure membership obligations are continuously met.

Management's expertise level must be commensurate with its current and projected risk activities. Specific capabilities of officials and operating management will be evaluated and ranked when reviewing the risk management process established for various risk activities.

When assigning the component ratings to Operations and Board Oversight, Audit & Compliance, the examiner will draw upon the analysis of various qualitative risk factors. This process will provide an assessment of the officials overall ability to effectively identify, measure, monitor, report, and control each of the numerous risks inherent in the corporate's operation. Other less tangible or measurable aspects of the management function will be reviewed and risk ranked under the component Evaluation Factors listed below. The examiner should refer to various chapters of this guide when assessing the quality of specific managerial and operational functions.

The following Evaluation Factors should be considered in conjunction with the Expanded Authorities under which the corporate operates (if applicable). The assessment of management's performance under each of these Evaluation Factors is used to determine the overall Operations and Board Oversight, Audit & Compliance Component Ratings.

Operations Component Rating

1. Overall completeness of documented procedures for all operational areas;
2. Adequacy of internal controls for all operational areas;
3. Adequacy of management of MIS systems risk including the LAN, wires, ACH, and item processing; and
4. Other evaluation factors as applicable.

Board Oversight, Audit and Compliance Component

1. Management's overall strategic planning process;
2. Appropriateness and completeness of succession planning;
3. Management’s ability to attract and retain sufficiently qualified and experienced personnel;
4. Quality of policy and procedure making activities for all operational areas;
5. Adequacy of continuing education and training for the board, committees, and staff;
6. Effectiveness of the board, committees, and staff;
7. Independence and effectiveness of compliance function;
8. Response to supervision;
9. Accuracy of financial reporting and accounting functions;
10. Response to the internal and external audit functions;
11. Extent of cross training and backup processes;
12. Adequacy and effectiveness of the corporate’s infrastructure;
13. Management's effectiveness in addressing legal matters;
14. Effective use of consultants, vendors, and outsourcing; and
15. Other evaluation factors as applicable.

Both the Operations and Board Oversight, Audit & Compliance Component Ratings are qualitative. The overall evaluation of management effectiveness and internal controls does incorporate many of the underlying quantitative factors of the other risk management components, as well as internal, operational, and system controls for corporate operations.

When considering the assignment of risk rankings to the above Evaluation Factors, the examiner should refer to applicable sections of this guide, Part 704, and the Guidelines for Submission of Requests for Expanded Authorities.

Examination Objectives

The EIC's assignment of CRIS Composite Ratings culminates an examination team's review of all significant financial, operational, and compliance evaluation factors in a corporate.

The examination objectives in assigning a CRIS Rating are to:

1. Reflect the weaknesses and corrective actions noted in the examination report;

2. Communicate the EIC's overall assessment of the corporate's condition and viability to NCUA; and

3. Disclose to management NCUA's overall assessment of the corporate's Financial Risk and Risk Management abilities.

Supervision

Supervision provided to individual corporates will be based upon the asset size, Expanded Authority level, and the CRIS Composite Ratings. Supervision plans are developed by the EIC with the concurrence of the CFS and the OCCU Director as discussed in Chapter 102 of this guide.

Examination Procedures Appendices

See Corporate Examination Procedures - CRIS (OCCU 401P).

Appendix 401 A - CRIS Composite and Component Rating Definitions & Evaluation Factors